

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P199558

Luminaire Tested: **S125-DIW-ULO-1-35-0048-1D-UDD-1-NA-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199558
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P27900 P27899)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125-DIW-ULO-1-35-0048-1D-UDD-1-NA-W
Description: DEFINE 5-INCH DIRECT/INDIRECT WALL LED LUMINAIRE
UPLIGHT LLO-3500K, NO LENS
DOWNLIGHT LL1-3500K, SATIN WHITE DIFFUSER
Light Source: -
757G
Ballast/Driver: ELECTRONIC DRIVERS

Summary

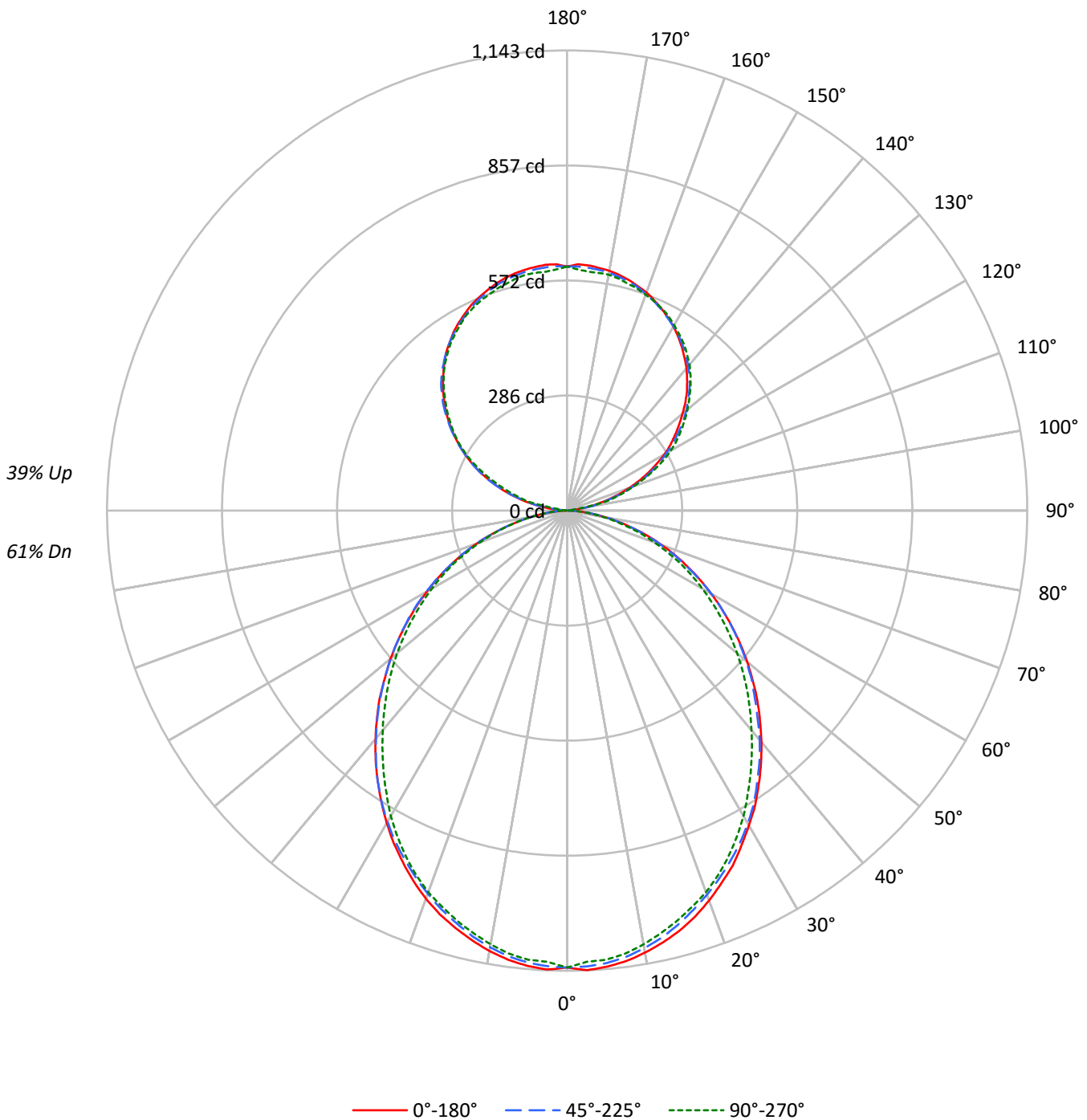
Lumens per Lamp: N/A
Luminaire Lumens: 4651.6 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4.08' x H: 0.38')
CIE Type: Semi-Direct

Input Watts (W): 40.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P199558

CATALOG NUMBER: S125-DIW-ULO-1-35-0048-1D-UDD-1-NA-W

Luminous Intensity Polar Plot





TEST NUMBER: P199558

CATALOG NUMBER: S125-DIW-ULO-1-35-0048-1D-UDD-1-NA-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 89 | 89 | 89 | 77 | 77 | 77 | 66 | 66 | 66 | 61 |
| 1 | 100 | 96 | 92 | 89 | 94 | 90 | 87 | 83 | 79 | 76 | 74 | 68 | 66 | 65 | 59 | 57 | 56 | 52 |
| 2 | 91 | 84 | 78 | 72 | 85 | 79 | 73 | 69 | 69 | 65 | 61 | 60 | 57 | 54 | 52 | 49 | 47 | 43 |
| 3 | 83 | 74 | 66 | 60 | 78 | 69 | 63 | 57 | 61 | 56 | 52 | 53 | 49 | 46 | 46 | 43 | 40 | 37 |
| 4 | 76 | 65 | 57 | 51 | 71 | 62 | 54 | 49 | 54 | 49 | 44 | 47 | 43 | 39 | 41 | 38 | 35 | 32 |
| 5 | 70 | 58 | 50 | 44 | 65 | 55 | 48 | 42 | 49 | 43 | 38 | 43 | 38 | 34 | 37 | 33 | 30 | 27 |
| 6 | 65 | 52 | 44 | 38 | 60 | 50 | 42 | 37 | 44 | 38 | 33 | 39 | 34 | 30 | 34 | 30 | 27 | 24 |
| 7 | 60 | 47 | 39 | 34 | 56 | 45 | 37 | 32 | 40 | 34 | 29 | 35 | 30 | 27 | 31 | 27 | 24 | 21 |
| 8 | 56 | 43 | 35 | 30 | 52 | 41 | 34 | 29 | 36 | 30 | 26 | 32 | 27 | 24 | 28 | 24 | 21 | 19 |
| 9 | 52 | 40 | 32 | 27 | 49 | 37 | 30 | 26 | 33 | 28 | 24 | 30 | 25 | 21 | 26 | 22 | 19 | 17 |
| 10 | 49 | 36 | 29 | 24 | 45 | 34 | 28 | 23 | 31 | 25 | 21 | 27 | 23 | 19 | 24 | 20 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|------|------|------|
| 0° | 7180 | 7180 | 7180 |
| 5° | 7163 | 6591 | 7150 |
| 10° | 7047 | 6065 | 7021 |
| 15° | 6904 | 5567 | 6860 |
| 20° | 6715 | 5114 | 6683 |
| 25° | 6514 | 4662 | 6458 |
| 30° | 6264 | 4214 | 6216 |
| 35° | 6023 | 3765 | 5953 |
| 40° | 5757 | 3353 | 5677 |
| 45° | 5476 | 2977 | 5395 |
| 50° | 5176 | 2616 | 5077 |
| 55° | 4856 | 2263 | 4741 |
| 60° | 4512 | 1917 | 4391 |
| 65° | 4135 | 1583 | 3987 |
| 70° | 3693 | 1228 | 3518 |
| 75° | 3098 | 873 | 2884 |
| 80° | 2345 | 543 | 2146 |
| 85° | 1402 | 237 | 1229 |



TEST NUMBER: P199558

CATALOG NUMBER: S125-DIW-ULO-1-35-0048-1D-UDD-1-NA-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 106.7 | 2.3 |
| 10°-20° | 299.6 | 6.4 |
| 20°-30° | 440.2 | 9.5 |
| 30°-40° | 508.4 | 10.9 |
| 40°-50° | 503.9 | 10.8 |
| 50°-60° | 437.0 | 9.4 |
| 60°-70° | 319.2 | 6.9 |
| 70°-80° | 174.4 | 3.8 |
| 80°-90° | 45.3 | 1.0 |
| 90°-100° | 19.4 | 0.4 |
| 100°-110° | 128.7 | 2.8 |
| 110°-120° | 236.1 | 5.1 |
| 120°-130° | 306.1 | 6.6 |
| 130°-140° | 332.6 | 7.2 |
| 140°-150° | 314.4 | 6.8 |
| 150°-160° | 255.7 | 5.5 |
| 160°-170° | 166.3 | 3.6 |
| 170°-180° | 57.5 | 1.2 |
| 0°-30° | 846.5 | 18.2 |
| 0°-40° | 1354.8 | 29.1 |
| 0°-60° | 2295.7 | 49.4 |
| 0°-90° | 2834.8 | 60.9 |
| 90°-120° | 384.2 | 8.3 |
| 90°-150° | 1337.3 | 28.7 |
| 90°-180° | 1817.0 | 39.1 |
| 0°-180° | 4651.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1135 | 1135 | 1135 | 1135 | 1135 | |
| 5° | 1137 | 1128 | 1120 | 1127 | 1135 | 108 |
| 15° | 1080 | 1065 | 1055 | 1061 | 1073 | 304 |
| 25° | 973 | 960 | 948 | 956 | 965 | 447 |
| 35° | 830 | 823 | 795 | 820 | 820 | 519 |
| 45° | 668 | 659 | 632 | 656 | 658 | 515 |
| 55° | 498 | 497 | 469 | 488 | 486 | 446 |
| 65° | 331 | 328 | 310 | 320 | 319 | 328 |
| 75° | 170 | 169 | 156 | 159 | 158 | 181 |
| 85° | 40 | 42 | 37 | 37 | 35 | 45 |
| 90° | 1 | 3 | 1 | 2 | 1 | 3 |
| 95° | 13 | 4 | 4 | 6 | 30 | 19 |
| 105° | 106 | 112 | 120 | 132 | 135 | 112 |
| 115° | 222 | 232 | 238 | 250 | 249 | 219 |
| 125° | 327 | 337 | 345 | 352 | 350 | 293 |
| 135° | 421 | 430 | 434 | 443 | 436 | 324 |
| 145° | 496 | 501 | 505 | 509 | 509 | 311 |
| 155° | 554 | 552 | 555 | 559 | 564 | 255 |
| 165° | 593 | 589 | 584 | 593 | 598 | 167 |
| 175° | 611 | 605 | 596 | 606 | 613 | 58 |
| 180° | 606 | 606 | 606 | 606 | 606 | |



TEST NUMBER: P199558

CATALOG NUMBER: S125-DIW-ULO-1-35-0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 | 1134.9 |
| 2.5° | 1142.6 | 1130.8 | 1133.5 | 1131.4 | 1121.7 | 1130.1 | 1132.8 | 1128.7 | 1141.2 |
| 5° | 1137.0 | 1125.2 | 1128.0 | 1125.2 | 1119.6 | 1123.8 | 1126.6 | 1122.4 | 1134.9 |
| 7.5° | 1128.7 | 1116.2 | 1118.3 | 1115.5 | 1109.9 | 1113.4 | 1116.9 | 1112.7 | 1125.2 |
| 10° | 1114.8 | 1103.0 | 1103.7 | 1100.2 | 1093.9 | 1098.1 | 1101.6 | 1098.1 | 1110.6 |
| 12.5° | 1098.8 | 1086.3 | 1086.3 | 1080.7 | 1075.2 | 1078.7 | 1083.5 | 1080.7 | 1093.2 |
| 15° | 1080.0 | 1066.9 | 1064.8 | 1061.3 | 1055.0 | 1059.2 | 1061.3 | 1060.6 | 1073.1 |
| 17.5° | 1057.1 | 1043.2 | 1040.5 | 1039.8 | 1032.1 | 1037.7 | 1038.4 | 1036.3 | 1051.6 |
| 20° | 1030.7 | 1017.5 | 1015.5 | 1014.8 | 1008.5 | 1012.7 | 1012.7 | 1009.9 | 1025.9 |
| 22.5° | 1001.6 | 989.1 | 988.4 | 987.0 | 980.0 | 984.9 | 984.9 | 980.7 | 996.7 |
| 25° | 973.1 | 957.8 | 959.9 | 956.4 | 948.1 | 955.0 | 955.7 | 948.8 | 964.8 |
| 27.5° | 937.7 | 925.9 | 930.0 | 923.8 | 912.7 | 921.7 | 925.9 | 915.4 | 932.1 |
| 30° | 902.9 | 890.4 | 897.4 | 886.3 | 876.5 | 884.9 | 892.5 | 879.3 | 896.0 |
| 32.5° | 868.9 | 854.3 | 862.7 | 848.8 | 834.9 | 845.3 | 857.8 | 845.3 | 858.5 |
| 35° | 830.0 | 818.2 | 823.1 | 808.5 | 794.6 | 805.0 | 820.3 | 808.5 | 820.3 |
| 37.5° | 791.1 | 781.4 | 784.9 | 767.5 | 753.6 | 764.0 | 780.0 | 771.0 | 781.4 |
| 40° | 750.8 | 743.9 | 743.9 | 726.5 | 712.6 | 722.3 | 739.0 | 734.2 | 740.4 |
| 42.5° | 709.2 | 706.4 | 700.8 | 685.5 | 672.3 | 682.1 | 698.0 | 696.6 | 699.4 |
| 45° | 668.2 | 668.2 | 659.1 | 643.2 | 632.1 | 641.1 | 655.7 | 659.1 | 658.4 |
| 47.5° | 625.8 | 629.3 | 621.6 | 604.3 | 591.8 | 600.8 | 614.0 | 620.2 | 613.3 |
| 50° | 583.4 | 589.7 | 580.0 | 564.7 | 550.8 | 560.5 | 571.6 | 580.0 | 572.3 |
| 52.5° | 541.1 | 548.7 | 538.3 | 523.7 | 509.8 | 518.8 | 530.0 | 539.7 | 530.0 |
| 55° | 498.0 | 507.0 | 497.3 | 482.0 | 468.8 | 477.2 | 488.3 | 498.0 | 486.2 |
| 57.5° | 455.6 | 464.0 | 455.6 | 440.4 | 427.9 | 435.5 | 447.3 | 454.9 | 444.5 |
| 60° | 413.3 | 422.3 | 414.0 | 399.4 | 387.6 | 393.8 | 404.9 | 412.6 | 402.2 |
| 62.5° | 371.6 | 379.2 | 370.2 | 358.4 | 349.4 | 352.1 | 362.6 | 371.6 | 360.5 |
| 65° | 330.6 | 337.6 | 327.8 | 317.4 | 309.8 | 311.2 | 320.2 | 325.1 | 318.8 |
| 67.5° | 290.3 | 298.0 | 287.6 | 277.8 | 268.8 | 271.6 | 279.2 | 286.2 | 278.5 |
| 70° | 250.0 | 257.7 | 246.6 | 238.2 | 230.6 | 232.0 | 238.2 | 245.9 | 238.2 |
| 72.5° | 210.5 | 216.7 | 209.1 | 199.3 | 193.8 | 195.2 | 198.6 | 205.6 | 198.0 |
| 75° | 170.2 | 177.1 | 168.8 | 161.1 | 155.6 | 157.0 | 159.1 | 164.6 | 158.4 |
| 77.5° | 132.7 | 137.5 | 132.0 | 125.7 | 122.2 | 122.9 | 123.6 | 127.8 | 122.2 |
| 80° | 97.9 | 102.1 | 98.6 | 93.8 | 91.0 | 91.0 | 91.0 | 94.5 | 89.6 |
| 82.5° | 66.7 | 70.8 | 68.1 | 64.6 | 62.5 | 60.4 | 61.8 | 64.6 | 60.4 |
| 85° | 39.6 | 43.1 | 41.7 | 38.2 | 36.8 | 35.4 | 36.8 | 38.2 | 34.7 |
| 87.5° | 18.1 | 20.8 | 18.8 | 15.3 | 13.9 | 12.5 | 12.5 | 14.6 | 11.8 |
| 90° | 1.4 | 3.5 | 2.8 | 2.1 | 1.4 | 1.4 | 2.1 | 2.8 | 1.4 |
| 92.5° | 1.8 | 2.5 | 2.5 | 2.9 | 2.9 | 3.2 | 3.6 | 4.3 | 12.1 |
| 95° | 12.8 | 14.3 | 3.9 | 4.3 | 4.3 | 4.6 | 6.1 | 34.6 | 29.6 |
| 97.5° | 29.6 | 37.8 | 12.5 | 7.5 | 6.8 | 10.0 | 38.5 | 55.0 | 52.1 |
| 100° | 52.8 | 58.9 | 59.6 | 38.9 | 26.4 | 54.6 | 76.0 | 82.1 | 78.2 |
| 102.5° | 78.2 | 84.9 | 83.2 | 90.3 | 92.8 | 100.6 | 102.4 | 110.3 | 107.1 |
| 105° | 105.6 | 113.1 | 112.1 | 119.2 | 119.9 | 128.8 | 132.4 | 137.0 | 135.3 |
| 107.5° | 134.6 | 139.9 | 142.8 | 147.4 | 147.0 | 156.7 | 163.8 | 166.0 | 164.2 |
| 110° | 164.2 | 167.7 | 173.1 | 176.3 | 176.3 | 185.9 | 194.2 | 194.5 | 192.7 |



TEST NUMBER: P199558

CATALOG NUMBER: S125-DIW-ULO-1-35-0048-1D-UDD-1-NA-W

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 192.4 | 198.4 | 203.4 | 207.4 | 206.6 | 217.0 | 222.7 | 223.8 | 221.6 |
| 115° | 222.3 | 224.8 | 231.6 | 237.3 | 238.4 | 246.3 | 250.2 | 251.3 | 249.1 |
| 117.5° | 249.8 | 253.8 | 258.0 | 264.8 | 268.4 | 273.4 | 276.2 | 278.0 | 275.9 |
| 120° | 279.1 | 281.6 | 284.1 | 290.5 | 296.9 | 299.8 | 301.9 | 303.4 | 301.6 |
| 122.5° | 304.4 | 306.2 | 311.6 | 315.9 | 322.3 | 324.4 | 327.6 | 327.3 | 325.8 |
| 125° | 326.9 | 329.4 | 337.3 | 339.8 | 345.1 | 348.0 | 351.9 | 349.8 | 349.8 |
| 127.5° | 350.5 | 352.6 | 362.6 | 363.0 | 368.0 | 371.2 | 376.2 | 372.6 | 373.0 |
| 130° | 373.7 | 377.2 | 386.2 | 386.2 | 390.1 | 393.7 | 399.4 | 394.0 | 395.4 |
| 132.5° | 398.3 | 399.4 | 407.6 | 407.9 | 411.5 | 415.1 | 421.9 | 414.7 | 416.1 |
| 135° | 420.8 | 419.7 | 430.4 | 428.6 | 433.6 | 435.8 | 442.6 | 434.0 | 436.5 |
| 137.5° | 441.1 | 438.6 | 450.1 | 448.3 | 453.6 | 454.0 | 461.1 | 452.9 | 455.8 |
| 140° | 461.1 | 458.3 | 467.9 | 466.8 | 472.9 | 472.2 | 477.5 | 470.8 | 474.7 |
| 142.5° | 479.0 | 475.7 | 485.0 | 484.7 | 489.3 | 489.3 | 493.9 | 488.2 | 493.9 |
| 145° | 496.4 | 492.2 | 500.7 | 500.4 | 505.4 | 505.0 | 509.3 | 503.9 | 509.3 |
| 147.5° | 512.9 | 508.6 | 515.4 | 514.6 | 518.9 | 519.3 | 522.9 | 519.6 | 525.4 |
| 150° | 527.9 | 523.9 | 528.2 | 527.9 | 531.8 | 532.1 | 535.7 | 534.3 | 538.6 |
| 152.5° | 541.4 | 537.8 | 540.0 | 539.3 | 545.0 | 542.8 | 547.1 | 546.4 | 551.1 |
| 155° | 553.9 | 550.3 | 552.1 | 550.7 | 554.6 | 554.3 | 558.9 | 558.2 | 563.5 |
| 157.5° | 565.3 | 561.4 | 562.8 | 560.7 | 563.5 | 563.5 | 568.9 | 568.9 | 572.8 |
| 160° | 576.4 | 571.0 | 572.8 | 569.3 | 570.3 | 571.8 | 578.2 | 578.2 | 581.7 |
| 162.5° | 584.2 | 580.7 | 581.7 | 576.7 | 577.8 | 578.5 | 586.0 | 586.0 | 590.3 |
| 165° | 592.8 | 588.2 | 589.2 | 583.2 | 583.5 | 585.3 | 592.8 | 593.2 | 597.8 |
| 167.5° | 599.6 | 595.0 | 594.6 | 588.5 | 590.3 | 590.7 | 597.8 | 598.2 | 603.2 |
| 170° | 604.9 | 599.9 | 599.9 | 593.5 | 595.0 | 594.2 | 601.7 | 602.8 | 607.1 |
| 172.5° | 607.8 | 604.2 | 603.2 | 596.0 | 595.7 | 596.7 | 604.6 | 606.0 | 610.3 |
| 175° | 611.4 | 607.1 | 605.3 | 598.5 | 595.7 | 599.2 | 606.4 | 607.8 | 612.8 |
| 177.5° | 612.4 | 608.2 | 606.7 | 599.6 | 599.6 | 600.3 | 607.4 | 608.5 | 612.4 |
| 180° | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 |

(END OF REPORT)